

**REMARKS**

Claims 30-32, 34-36, 38-40 and 43 are pending in this application. By this Amendment, each of independent claims 30, 34, 38 and 43 are amended for clarity in view of the comments made in the Final Rejection.

Entry of this Amendment is proper under 37 C.F.R. §1.116 because the amendments: a) place the application in condition for allowance for the reasons set forth below; b) do not raise any new reasons that require further search and/or consideration; and c) place the application in better form for an appeal should an appeal be necessary. More specifically, the above amendments merely clarify previously claimed subject matter. That is, it appears that the Office Action misinterprets the claim language (and similar claim language) reciting “each of the plurality of reverse communication channels and each of the plurality of forward communication channels have a unique code.” [Emphasis Added.] That is, the Office Action does not appear to recognize the use of the word “each” and “unique” in its interpretation. Therefore, in order to clarify the claim language, each of the independent claims has been amended to recite these features in a slightly different manner. Thus, no further search and/or consideration is necessary. Entry is proper under 37 C.F.R. §1.116.

The Office Action rejects claims 30-32, 34-36, 38-40 and 43 under 35 U.S.C. §102(e) by U.S. Patent 5,235,615 to Omura. The rejection is respectfully traversed.

Independent claim 30 recites each of the plurality of reverse communication channels and each of the plurality of forward communication channels utilize one common frequency and

each of the plurality of reverse communication channels having a unique code to identify the channel as a reverse communication channel and each of the plurality of forward communication channels having a unique code to identify the channel as a forward communication channel.

As previously argued in the September 7, 2004 Amendment, Omura's base-band communication signal and the remote-communication signal do not each have a unique code. That is, Omura discloses a "unique chip code word" as being the same (or possibly the same) for both the base-communications signal and the remote-communications signal. In fact, the Office Action specifically states that Omura has a possibility of having the code word be the same for both uplink and downlink transmission. Clearly a similar code word is not a unique code word for uplink and downlink transmission.

The Office Action makes comments on pages 7-9 relating to subject matter that is not claimed. That is, this section appears to state that Omura has a possibility of having a unique code to be the same for both an uplink and downlink transmission. However, the claims previously recited that each of reverse communication channels and each of the forward communication channels have a unique code. Stated differently, the forward and reverse communication channels have different and unique codes assigned to them. However, the Office Action has not interpreted the claims as such. Rather, the Office Action appears to interpret the claims as meaning the forward and reverse channels have similar codes.

Independent claim 30 now recites that each of the plurality of reverse communication channels having a unique code to identify the channel as a reverse communication channel and

each of the plurality of forward communication channels having a unique code to identify the channel as a forward communication channel. See, for example, Figure 4 showing codes 1, 3, 5 and 7 used as codes for forward communication channels and codes 2, 4, 6 and 8 used as codes for reverse communication channels. That is, the code assigned to each of the forward communication channels is unique as compared to the code assigned to each of the reverse communication channels.

Omura does not relate to the communication channels having unique codes depending on whether they are reverse or forward communication channels. That is, as is clearly set forth in Omura's col. 6, lines 45-47, each remote communication signal has a unique chip code word. Furthermore, each base-band communication signal has its unique chip code word. See col. 6, lines 22-24. This does not suggest the unique codes as recited in independent claim 30. The Office Action (on pages 7-9) appears to interpret claim 30 as relating to the unique chip codes being the same. However, Omura has no suggestion for the reverse communication channel and the forward communication channels each having unique codes to identify the channels as reverse communication channels or forward communication channels.

Omura relates to code division (CD) and more specifically relates to multiple access (i.e. CDMA). Multiple access differs from full duplex as in the present application. Omura does not relate to code division for full duplex. More specifically, in Omura's code division a unique code is given to each user. This clearly differs from the code division of the present application in which a unique code is given to each channel (forward and reverse). In other words, Omura's code division does not relate to full duplex code division. These differences are set forth in the

claims. That is, independent claim 30 recites that each of the plurality of reverse communication channels having a unique code to identify the channel as a reverse communication channel and each of the plurality of forward communication channels having a unique code to identify the channel as a forward communication channel. Omura's CDMA does not teach or suggest these features.

Additionally, page 1, lines 11-19 of the present specification discusses different types of communications. As discussed therein, Frequency Division Multiple Access (FDMA), Time Division Multiple Access (TDMA) and Code Division Multiple Access (CDMA) allow multiple users to share a channel. Bi-directional communication may be achieved by Frequency Division Duplexing (FDD) or Time Division Duplexing (TDD), for example. Accordingly, there are differences between FDMA and FDD as well as differences between TDMA and TDD. The present application also discusses Code Division Duplexing (CDD) that allows bi-directional communication. See page 4, beginning at line 18. Similar to TDMA and FDMA, there are differences between CDMA and CDD. However, a CDD system/method may be used in conjunction with other systems/methods so as to form CDMA/CDD systems, FDMA/CDD systems and/or TDMA/CDD systems. Omura's CDMA system does not suggest a full duplex system such as a CDD system. Thus, Omura does not teach or suggest the features of independent claim 30 as discussed above.

The Office Action also questions the comments on page 6, lines 4-5 of the present specification. However, these comments relate to each user having a unique code for forward and reverse direction communication. As one example, as shown in Figure 4, code 1 may be

used for a forward channel for a first user and code 2 may be used for a reverse channel for the first user. A second user may have different codes for both its forward and reverse communication channels such as code 3 may be used for a forward channel for the second user and code 4 may be used for a reverse channel for the second user. Merely because different users may have unique codes does not contradict the previous arguments as alleged in the Office Action.

As discussed in the present application, a unique code is provided to each user for making a distinction between forward channel and reverse channel, not for distinguishing each user as in CDMA systems. Furthermore, in Omura, “the same unique code for a reverse and forward link” is for distinguishing each user, not for distinguishing forward channel and reverse channel. Therefore, the specification and the claims do not have contradicting arguments as alleged in the Office Action (on page 8, lines 11-12).

For at least the reasons set forth above, Omura does not teach or suggest the claimed each of the plurality of reverse communication channels having a unique code to identify the channel as a reverse communication channel and each of the plurality of forward communication channels having a unique code to identify the channel as a forward communication channel as recited in independent claim 30. Independent claim 30 therefore defines patentable subject matter.

Furthermore, each of independent claims 34, 38 and 43 define patentable subject matter for at least similar reasons as claim 30. Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In

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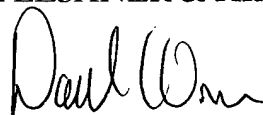
addition, the dependent claims also recite features that further and independently distinguish over the applied references.

### **CONCLUSION**

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 30-32, 34-36, 38-40 and 43 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David C. Oren**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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